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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------|------------------|
| 10/002,047   | 11/02/2001  | Jeffrey T. Eschbach  | 68695                    | 3438             |
| 22242  | 7590        | 07/26/2005           |                          |                  |
| FITCH EVEN TABIN AND FLANNERY<br>120 SOUTH LA SALLE STREET<br>SUITE 1600<br>CHICAGO, IL 60603-3406 |             |                      |                          |                  |
|  |             |                      | EXAMINER<br>MERED, HABTE |                  |
|  |             |                      | ART UNIT<br>2662         | PAPER NUMBER     |

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/002,047 | <b>Applicant(s)</b><br>ESCHBACH ET AL |  |
|                              | <b>Examiner</b><br>Habte Mered       | <b>Art Unit</b><br>2662               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wada et al (US 5, 517, 618), hereinafter referred to as Wada, in view of Perkins (C. E. Perkins, "Mobile IP: Design, Principles, and Practices", Pages 99-108 & 133-147, Addison Wesley Longman, 1998).

3. Regarding **Claims 1, 2, 10, 14, 17, 19 and 20**, Wada teaches a method of seamlessly transferring a communication session on an IP network, the method comprising: initiating a session between a correspondent device and a first device having a first device IP address (**See Column 11, Lines 30-34 and Column 11 Line 60 to Column 12 Line 20**); generating a temporary IP address for the first device (**See Figure 19**); registering a desire to transfer the session from the first device to a second device; transferring the first device IP address to a Session Agent so that the Session Agent can intercept sessions addressed to the first device IP address (**See Column 16, Lines 25-55**) ; and transferring the session from the first device to the second device so that data transferred from the correspondent device to the first device via the first device address will be received by the second device (**See Column 16 Lines 55 to Column 17, Line 10; Column 30, Lines 20-35**).

Wada, however, fails to expressly disclose that the transfer of session from the first device to the second device is done via a Session Agent.

Perkins teaches that session transfers from a first device to a second device is done via a Session Agent (**i.e. Foreign Agent. See Page 133, Lines 1-5**)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of session agent. The motivation being to ensure that efficient soft handoffs can occur between neighboring sub-networks.

4. Regarding **claim 3**, Wada teaches all aspects of the claimed invention as set forth in the rejection of claims 1 and 2 but fails to teach a method, wherein the negotiating to transfer the session comprises: creating a method for securely transferring the communication session from the first device to the second device.

Perkins teaches a method, wherein the negotiating to transfer the session comprises: creating a method for securely transferring the communication session from the first device to the second device. (**See Page 133, Paragraph 3**)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of securely transferring sessions, the motivation being to ensure that some level of security is provided to prevent security risk from unwanted intruders.

5. Regarding **claim 4**, Wada teaches all aspects of the claimed invention as set forth in the rejection of claims 1 and 2 but fails to teach the created method for securely transferring the communication session comprises: generating a random number to

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serve as a session key for the secure transfer of the session between the first device and the second device.

Perkins teaches that the created method for securely transferring the communication session comprises: generating a random number to serve as a session key for the secure transfer of the session between the first device and the second device. **(See Page 133, Last Paragraph and Page 134, First Paragraph)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of securely transferring sessions using a register key having a random value, the motivation being to ensure that some level of security is provided to prevent security risk from unwanted intruders.

6. Regarding **claims 5 and 12**, Wada teaches all aspects of the claimed invention as set forth in the rejection of claims 1, 2, and 10 but fails to teach a method where the method further comprises: encrypting the session key; transferring the encrypted session key from the first device to the second device and from the first device to the Session Agent; and using the session key to securely transfer the communication session from the Session Agent to the second device.

Perkins teaches a method where the method further comprises: encrypting the session key; transferring the encrypted session key from the first device to the second device and from the first device to the Session Agent; and using the session key to securely transfer the communication session from the Session Agent to the second device. **(See Pages 134-137, Sections 6.1.3. and 6.1.4.)**

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of securely transferring sessions where the session key is encrypted, the motivation being to ensure that some level of security is provided to prevent security risk from unwanted intruders.

7. Regarding **claims 6 and 15**, Wada teaches all aspects of the claimed invention as set forth in the rejection of claims A method according to claims 1, 2 and 14 but fails to teach a method, wherein the intercepting of the specific session to be transferred comprises: scanning a packet header for information which is associated with the registered session to be transferred so that the Session Agent can determine whether the packet is to be transferred to the second device.

Perkins teaches a method, wherein the intercepting of the specific session to be transferred comprises: scanning a packet header for information which is associated with the registered session to be transferred so that the Session Agent can determine whether the packet is to be transferred to the second device. **(See Page 116 Section 5.9.3)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of tunneling which is reading headers to determine where to transfer data for the 2<sup>nd</sup> device, the motivation being to ensure that the mobile device will continue to get data forwarded to its original IP address.

8. Regarding **claims 7 and 11**, Wada teaches all aspects of the claimed invention as set forth in the rejection of claims 1 and 2, but fails to teach a method wherein scanning a packet header comprises: scanning a packet header for at least one of a source port, source IP address, protocol, destination port and destination IP address to identify the registered session to be transferred so that the Session Agent can determine whether the packet is to be transferred to the second device.

Perkins teaches a method wherein scanning a packet header comprises: scanning a packet header for at least one of a source port, source IP address, protocol, destination port and destination IP address to identify the registered session to be transferred so that the Session Agent can determine whether the packet is to be transferred to the second device. **(See Page 116 Section 5.9.3; Figure 5.4 on Page 101)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of tunneling which is reading headers to determine where to transfer data for the 2<sup>nd</sup> device, the motivation being to ensure that the mobile device will continue to get data forwarded to its original IP address.

9. Regarding **claims 8, 13 and 16**, Wada teaches all aspects of the claimed invention as set forth in the rejection of claims 1, 2, and 10, but fails to teach a method wherein the method further comprises: generating a wake-up message via the Session Agent once the communication session is no longer to be transferred causing the first device to resume receiving communication sessions addressed to its IP address.

Perkins teaches a method wherein the method further comprises: generating a wake-up message via the Session Agent once the communication session is no longer to be transferred causing the first device to resume receiving communication sessions addressed to its IP address. **(See Page 142, Section 6.2.3, A binding Update message is sent by the mobile's Home Agent).**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of binding update messages as wake-up messages, the motivation being to ensure that radio resources are not wasted.

10. Regarding **claim 9**, Wada teaches a method, wherein the method further comprises: initiating a second session between a second correspondent device and the first device **(See Column 11, Lines 30-34 and Column 11 Line 60 to Column 12 Line 20)**; determining which session is to be transferred from the first device to the second device **(Wada shows that the migration communication control unit is able to handle more than one session as shown in Figures 5 and 6)**; transferring the session that is to be transferred from the first device to the second device via the Session Agent so that the session desired to be transferred from the first device to the second device will be transferred to the second device; and transferring the session that is not to be transferred to the first device via the Session Agent and the temporary IP address so that the first device can continue to receive desired sessions. **(See Column 16 Lines 55 to Column 17, Line 10; Column 30, Lines 20-35)**



Wada, however, fails to expressly disclose that the transfer of session from the first device to the second device is done via a Session Agent.

Perkins teaches that session transfers from a first device to a second device is done via a Session Agent (**i.e. Foreign Agent. See Page 133, Lines 1-5.**)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Wada's method to incorporate the use of session agent. The motivation being to ensure that efficient soft handoffs can occur between neighboring sub-networks.

11. Regarding **claim 18**, Wada teaches a method, further comprising: a Session Agent for intercepting the sessions of communication directed to the first device at the first IP address and transferring these sessions to the second device. (**Wada teaches generating a proxy ARP message to bind a link layer address associated with the second node's to the session specific IP address so that the second node can intercept the communication pertaining to the session specific IP address. See Column 16, Lines 20-35**)

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HM  
07-25-2005



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